

ABSTRACT OF THE DISCLOSURE

A diffraction element includes a light-transmittable member and a diffraction grating formed on at least one face of the light-transmittable member. When a first laser beam having a first wavelength λ_1 and a second laser beam having a second wavelength λ_2 are transmitted through the diffraction element at first and second diffraction efficiencies, respectively, the diffraction element functions to equalize the first and second diffraction efficiencies to each other by only the one face of the diffraction element. The diffraction grating has a first phase modulation amount ϕ_1 for the first laser beam and a second phase modulation amount ϕ_2 for the second laser beam and the first and second phase modulation amounts ϕ_1 and ϕ_2 are, respectively, approximate to $(2\pi N_1 \pm \Delta\phi)$ and $(2\pi N_2 \pm \Delta\phi)$ in which "N1" and "N2" are natural numbers and " $\Delta\phi$ " is a phase variation amount.